

Appln No. 09/483,315
Amdt date March 15, 2005
Reply to Office action of September 15, 2004

REMARKS/ARGUMENTS

Introduction

Applicants wish to thank the Examiner for granting an interview on August 5, 2004. The following is a summary of the interview, a summary of a prior art reference discussed in the interview, a summary of the Final Rejection issued on September 15, 2004, a summary of the references cited in the Final Rejection and an explanation as to why Applicants believe that the above amendments place the application in condition for allowance.

Summary of Interview

During the interview conducted on August 5, 2004, claims 76 - 95 were discussed. The support in the specification for the claimed inventions was discussed. The general nature of the invention including the capability of the invention to perform full two-way video conferencing, where video information can be streamed to the mobile access unit from a remote source and real-time video can be generated and streamed from the mobile access unit were discussed. The cited prior art was also discussed and the Examiner cited the reference U.S. Patent 5,844,601 to McPheely et al. (the McPheely et al. patent) as being relevant to the prosecution of the patent application. This reference is made of record in the Information Disclosure Statement accompanying this amendment. No agreement was reached with regard to the patentability of the claims.

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Summary of U.S. Patent 5,844,601

The McPheely et al. patent describes the following (see Abstract):

A system and method is disclosed for instructing personnel in the operation and servicing of machinery at a plant from a geographically remote service center employing trained personnel. The system and method includes monitoring operating machinery at the plant with a video camera and transmitting a video signal to a base unit associated with the plant having a high resolution monitor. Audio communication is also provided between plant personnel and the personnel at the service center wherein audio signals are received and transmitted through the base unit. The video and audio signals are processed together at the base unit for synchronous transmission over a telecommunication system to the remote service center. The machinery is monitored in the plant with a cordless portable video camera by moving the portable video camera to a desired area of the operating machinery which needs monitoring. Cordless headsets, worn by plant personnel attending the machinery, are utilized to provide audio communication through the base unit to the plant. The plant may be divided into a plurality of machinery zones having zone interface units hard wired to the base units. The video signal is transmitted using radio frequency (RF) transmissions to the zone interface unit, and then to the plant base unit. Switches may be used between the zone interface units and the base unit to provide reception of a strong video signal at the base units.

The device described in the McPheely et al. patent includes a camera and microphone that communicate with a base station. These aspects are described in the following excerpt (Col 5: Line 58 - Col 6: Line 58):

The portable unit has a video antenna 40 and a RF unit for transmitting first video signal V1 to a zone unit and antenna 12. The video antenna and RF unit is available in the industry, such as model BE420T available from Premier Wireless, Inc. of California. Portable video camera 11 can be equipped with a battery and an RF unit so it can be detached from the portable unit, hand held and carried by an operator 74 to focus on any specified area of the machine. Optional stationary camera 11a can be used in lieu of, or in addition to camera 11.

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Referring now to signal processing, base unit B generates a second video signal V2 to be transmitted by a telecommunications system line wherein the

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system may include a plurality of ISDN lines 21a, 21b, 21c (FIG. 1) in the preferred embodiment. A communication interface 23 receives digital video signal V2, as well as audio signals A1 over ISDN line 21, and transmits them to a remote service center D over ISDN line 92.

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In an advantageous aspect of the invention, as can best be seen in FIG. 7, base unit includes an audio transmitting antenna 70b. The audio component is connected to and controlled by the system device E. The video/audio signals are received by base unit B, and processed by signal processor device E, and transmitted as second video signals V2 over ISDN lines 21 to communication interface 23 and service center D. The video/audio signals are compressed and transmitted over the communication lines at a high rate to generate high quality transmissions between the base unit B and the service center D. Signal processor device E may include a suitable "CODEC" component which digitizes, compresses and codes/decodes the video and audio signals (FIG. 7).

Summary of Final Rejection

In the Final Rejection, all of the claims were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,600,734 to Gernert et al. (the Gernert et al. patent).

Summary of U.S. Patent 6,600,734

The Gernert et al. patent describes an "apparatus for interfacing a wireless local area network with a wide are, cellular or public switched telephone network including the function of a wireless LAN base station or access point, and a gateway." (Abstract)

The Gernert et al. patent teaches "remote mobile units 15," which are described as follows (Col 7: Lines 14 - 24):

Although hand-held, laser scanning bar-code reader data terminals are mentioned, the data terminals may also include bar-code readers of the CCD or wand type, and may be portable or stationery rather than hand-held. The mobile units 15 may also be voice communication handsets, pagers, still image or video cameras; or any combination of the foregoing. Other types of data gathering devices may be utilized as terminals and use the features of the invention, such as temperature, pressure, or other environmental measuring devices, event counters, voice or sound activated devices, intrusion detectors, etc.

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The Gernet et al. patent describes a different device having a codec. The description does not refer to the codec having the capability of handling video (Col 12: Lines 12 - 42):

The desk telephone includes a portable housing 162 including a keypad 170; a handset 166 including a microphone and a speaker; and a cable connecting said housing and said handset. A codec and signal processor is disposed in the housing for converting audio signals from the microphone into digital signals or voice datagrams. A keypad processor 172 is also provided in the housing for processing data (such as the extension or telephone number) entered on said keypad by the user into a destination network address to be used with the packetized digital signals. Circuitry first converts analog voice signals to digital samples using a coder-decoder (CODEC) using one of the ITU G.700 series standards for voice encoding. A digital signal processing chip may then compress the digital signal, since there is much silence and redundancy in most voice communications. Next, packets are formed from the compressed signal stream. A protocol stack software assembles a frame including the network address and the datagrams to be transferred over a radio communication link. A radio transceiver for communication frames including said packetized digital signals to and from a stationary base station preferably using frequency hopping spread spectrum communications in the 2.4 GHz ISM band. These packets will normally contain a header with a flag indicating that the packets contains voice encoded data. This allows a network node such as a hub or router to treat a voice packet differently from packets containing data, since it is desirable in voice communications that there be very little delay in the end-to-end transmission of voice packets, as opposed to data packets, since packet data service will not greatly be compromised when short packet delays are introduced.

Summary of proposed amendments

The proposed amendments seek to distinguish the claimed inventions from the prior art of record by highlighting that the claimed mobile access units are capable of both sending **and** receiving real-time video. In addition, the codec required to encode captured real-time video and decode received real-time video is located in the mobile access unit and **not** at a base station or other location remote from the mobile access unit. Furthermore, the real-time video is multiplexed with other information recorded by the mobile access unit to form a single data stream for transmission. As mentioned above, the data stream received by the mobile access unit includes real-time video. This real-time video is multiplexed with other information in the data stream and is demultiplexed and decoded by the mobile access unit so that it can be displayed.

Applicants submit that none of the prior art of record teaches these aspects of the invention or the combination of (Claim 1):

- a video input configured to receive real-time video information;
- a video output configured to provide real-time video information;
- a codec connected to the video input and video output; and
- a transceiver, comprising:

- a transmitter connected to the codec that is configured to transmit a data stream provided by the codec over an upstream wireless communication link;
- and

- a receiver connected to the codec that is configured to receive a data stream transmitted over a downstream wireless communication link, which includes encoded real-time video;

- wherein the codec is configured to:

- encode real-time video information received from the video input;

- and

- multiplex the encoded real-time video with other data to generate the data stream provided by the codec to the transmitter; and

- wherein the codec is also configured to:

- demultiplex the encoded real-time video from the data stream provided to the codec by the receiver; and

- decode the encoded real-time video information and provide the decoded real-time video information to the video output.

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Conclusion

In light of the above remarks, applicants respectfully submit that the amended claims are in condition for allowance and request the prompt issuance of a notice of allowance. If Applicants' counsel can be of assistance in any way, please contact them at the number listed below.

Respectfully submitted,

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By


David J. Bailey

Limited Recognition under 37 CFR § 11.9(b)
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